

FACE INVESTIGATION

SUBJECT: Mason Dies Following Three-Story Fall From Improvised Scaffolding

SUMMARY: A 35-year-old male mason (the victim) died as a result of falling from a scaffolding that had been improvised. The victim and two co-workers had been contracted to repair the brick facing near the top of a three story apartment building. The workers had improvised a scaffolding by lashing two rectangular metal frames to two extension ladders, and lashing a single fourteen-foot section of another extension ladder horizontally to the metal frames to create a platform worksurface. The platform worksurface was supported by two welded, bent metal rods that were hooked over the parapet wall. Also, they had attached a rope pulley system to one of the metal braces, and were using the pulley to raise five-gallon buckets of cement to the victim while he stood on the platform worksurface. At the time of the incident, the victim was standing on the platform, while a co-worker was positioned on one of the extension ladders and the other co-worker was on the ground at the base of the ladder. The victim instructed the worker on the ground to raise a bucket of cement. As the victim raised the bucket, it became stuck and the worker pulled firmly on the rope to dislodge it. The worker heard a cracking sound from above, and saw the victim fall to the ground. An onlooker called the paramedics, which arrived and transported the victim to the morgue. The Wisconsin FACE investigator concluded that, to prevent similar occurrences, employers should:

- ! ensure that equipment is only used for the purpose for which it was designed.**
- ! provide equipment that is approved and designed to meet the requirements of the job tasks.**

INTRODUCTION: On July 29, 1993, a 35-year-old male mason (the victim) died after falling about 40-feet from an improvised scaffolding. The Wisconsin FACE investigator was notified by the Wisconsin Department of Labor and Human Relations, Workers Compensation Division, on August 13, 1993. On November 3, 1993, the WI FACE field investigator conducted an investigation of the incident. A visit was made to the site of the incident, and the owner of the apartment building was interviewed. Photographs were taken of the incident site. The investigator obtained copies of the death certificate, medical examiner's report, and the police report and photographs. The police report contained interviews with bystanders and co-workers who witnessed the incident. The victim in this incident was self-employed, but no additional information was available about his experience, training background, or safety program.

INVESTIGATION:

The victim was contracted to repair the brick facing near the top of a three-story apartment building. The victim and two co-workers had improvised a scaffolding by lashing two rectangular steel metal frames to two twenty-foot extension ladders. The two ladders were nearly extended to their full length, and positioned against the side of the apartment building. Additionally a single fourteen-foot section of another extension ladder was lashed with nylon rope horizontally to the metal frames to create a platform worksurface. One welded, bent metal rod was

lashed with nylon rope to each metal frame, and these rods were hooked over the parapet wall to help support the platform worksurface. A rope pulley was lashed to one of the metal frames. The victim had worked at the worksite for three days. On the day of the incident, the victim and two co-workers had worked at the site all day, after arriving about 7:30 AM. Around 6:00 PM, the victim was standing on the platform, and a worker was positioned on one of the extension ladders. Another worker was on the ground, using the pulley to raise a five-gallon bucket of cement to the victim. The bucket became stuck, and the worker on the ground gave a firm tug on the rope to dislodge it. He heard a cracking sound from above and saw the victim fall from the platform to the ground. The worker on the ground went to where the victim had fallen, and the worker on the ladder came down to provide assistance. The victim was not breathing, and a bystander called the paramedics. The police and paramedics arrived, and the victim was pronounced dead at the scene at 6:40 PM. The body was transferred to the morgue.

CAUSE OF DEATH: The death certificate states the cause of death as traumatic head injuries.

RECOMMENDATIONS/DISCUSSION:

Recommendation #1: Employers should ensure that equipment is only used for the purpose for which it was designed.

Discussion: In this incident, the improvised scaffolding was used to provide a worksurface. The scaffolding was constructed of a section of an extension ladder that had been lashed to a metal frame that was in turn lashed to two vertical extension ladders. Ladders are designed to support a load in a vertical position, and should not be used in a horizontal position to provide a worksurface.

Recommendation #2: Employers should provide equipment that is approved and designed to meet the requirements of the job tasks.

Discussion: Equipment such as various types of scaffolding and elevated platform lifts along with appropriate personal protective equipment could have been used in this incident.